CLAIMS

What is claimed is:

1. A construction panel comprising:

(a) an upper portion; and

(b) a lower portion, said lower portion comprising a plurality of vertically extending members wherein each of said vertically extending member is an appropriate size and shape to provide the appearance of a shingle, shake or a tile;

wherein the panel is constructed of a material comprising a natural fiber and a synthetic polymer.

2. The panel of claim 1 wherein the plurality of members have non-uniform width, non-uniform length, or both non-uniform width and non-uniform length.

3. The panel of claim 1, wherein the plurality of vertically extending members further comprise non-uniform lower edges.

4. The panel of claim 1, wherein the lower portion of the panel further comprises a textured surface.

5. The panel of claim 4, wherein the textured surface replicates the appearance of a material selected from the group consisting of wood, clay, ceramic, slate, tile and combinations thereof.

6. The panel of claim 1, wherein the fiber is a natural plant fiber.

7. The panel of claim 6, wherein the fiber is selected from the group consisting of wood flour, sugar cane bagasse, hemp, coconut coir, jute, kenaf, sisal, flax, coir pith, rice-hulls and cotton, and combinations thereof.

8. The panel of claim 1, wherein the polymeric material is polyethylene, polypropylene and combinations thereof.

9. The panel of claim 8 wherein the polyethylene is selected from low density polyethylene, high density polyethylene, linear low density polyethylene and linear high density polyethylene.

10. The panel of claim 1 wherein adjacent members of the plurality of vertically extending members are connected together by a web of material.

11. A construction panel, comprising:

(a) from about 40 percent to 75 percent natural fiber;

(b) from about 20 percent to 60 percent of a polymeric material;

(c) up to about 3 percent coupling agent;

(d) up to about 1 percent of UV stabilizer;

(e) up to about 0.5 percent antioxidant;

(f) up to about 2 percent pigment;

(g) up to about 5 percent fungicide; and

(h) up to about 20 percent flame retardant.

12. The panel of claim 11, wherein the construction panel has an impact rating of class 3 or 4 under UL standard 2218.

13. The panel of claim 11, wherein the fiber is a natural plant fiber.

14. The panel of claim 13, wherein the fiber is selected from the group consisting of wood flour, sugar cane bagasse, hemp, coconut coir, jute, kenaf, sisal, flax, coir pith, rice-hulls and cotton, and combinations thereof.

15. The panel of claim 11, wherein the polymeric material is polyethylene, polypropylene and combinations thereof.

16. The panel of claim 15 wherein the polyethylene is selected from low density polyethylene, high density polyethylene, linear low density polyethylene and linear high density polyethylene.

17. A method of manufacturing a construction panel, comprising:

(a) mixing:

(i) from about 40 percent to 75 percent natural fiber;

(ii) from about 20 percent to 60 percent of a polymeric material;

(iii) up to about 3 percent coupling agent;

(iv) up to about 1 percent of UV stabilizer;

(v) up to about 0.5 percent heat stabilizer;

(vi) up to about 1 percent colorant;

(vii) up to about 5 percent fungicide; and

(viii) up to about 20 percent flame retardant;

to form a homogenous mixture;

(b) placing the homogenous mixture in an open mold in the shape of a construction panel; and

(c) molding the homogenous mixture into a construction panel by compressing the homogenous mixture into the mold.

18. The method of claim 17 wherein said mold comprises a die for forming:

(i) an upper portion; and

(ii) a lower portion, said lower portion comprising a plurality of vertically extending members wherein each of said vertically extending member is an appropriate size and shape to provide the appearance of a shingle, shake or a tile.